

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

January 14, 2010

TO: Internal File

THRU: Daron R. Haddock, Manager *JCH*

FROM: James D. Smith, Permit Supervisor *JS 1/14/10*

RE: 2009 Second Quarter Water Monitoring, PacifiCorp, Trail Mountain Mine,
C/015/0009, Task ID #3330

The Trail Mountain Mine is currently idle. The monitoring plan is described in Appendix A of Volume 9 of the MRP.

1. Were data submitted for all of the MRP required sites?

In-mine

YES ☒ NO ☐

The mine is sealed, so other than the Oliphant portal discharge (18-1-1 or T-18), which is monitored as a spring, there is no monitoring of underground or in-mine water.

Springs

YES ☒ NO ☐

During the 2nd Quarter, the Oliphant portal discharge (18-1-1 or T-18) is the only spring monitored.

Streams

YES ☒ NO ☐

UPDES

YES ☒ NO ☐

DMRs were submitted in electronic format (Adobe). There was no discharge from either UPDES point during the 2nd quarter 2009. The mine was sealed in June 2001 and there has been no reported discharge at UPDES UT23728-002 (the mine-water discharge into Cottonwood Creek) since May 2001.

Wells

YES ☒ NO ☐

WATER QUALITY MEMO

Since July 2004, the water level in TM-3 has been reported as head above the casing elevation, determined from pressure measured by a gauge on the sealed wellhead.

2. Were all required parameters reported for each site?

Springs	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
Streams	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
UPDES	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
Wells	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

3. Were any irregularities found in the data?

Listed parameters were outside two standard deviations. An asterisk (*) indicates this is not a parameter required by the MRP.

Springs	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
Streams	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

SW-1 June: field specific conductivity, Ca, Mg, Na, SO₄, total alkalinity*, lab specific conductivity*, TDS, total cations*, and total anions*.

SW-2 June: pH. UPDES discharge from the Cottonwood/Wilberg Mine through the Trail Mountain Access Tunnel (TMA) began in July 2001; prior to that date this water discharged from the Trail Mountain Mine portals in Grimes Wash. This discharge is the source of the jump in TDS, sulfate, Ca, Mg, and K concentrations at SW-2.

UPDES	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
Wells	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

TM-1B April, May, and June: depth. Head in TM-1B has been slowly rising since early 2003. The cause is not evident.

TM-1B June: bicarbonate as CaCO₃.

TM-3 April, May, and June: water elevation peaked in June 2005, remained steady through October, dropped 18.5 ft in November and December 2005 and remained virtually unchanged during 2006. The pressure gauge was replaced in January 2007 and values jumped to approximately match the pre-2006 curve. During the first half of 2007, the curve was relatively flat, but it resumed climbing during the third quarter and has continued on an upward trend.

4. On what date does the MRP require a five-year resampling of baseline water data.

WATER QUALITY MEMO

The next renewal submittal is due 10/21/09 for renewal on 02/21/10. Baseline analyses were performed in 2001 and 2006. Analyses for baseline parameters will be repeated every 5 years, i.e., the next baseline analyses will be in 2011.

5. Based on your review, what further actions, if any, do you recommend?

There is no further action recommended at this time.

6. Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements?

YES ☐ NO ☒

7. Follow-up from last quarter, if necessary.

NA

8. Did the Mine Operator respond adequately to queries about missing or irregular data?

YES ☒ NO ☐